## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2010-XXXX

# CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR

# TEICHERT CONSTRUCTION COMPANY NYACK PORTABLE BATCH PLANT AND CONCRETE RECYCLING SITE PLACER COUNTY

The Central Valley Regional Water Quality Control Board (hereafter Central Valley Water Board) finds that:

- 1. Water Code Section 13260(a) requires that any person discharging waste or proposing to discharge waste within the region that could affect the quality of waters of the state shall file a Report of Waste Discharge (RWD).
- 2. Teichert Construction Company (Discharger) submitted an RWD on 10 June 2010 for the Nyack Portable Batch Plant and Concrete Recycling Site (Portable Plant) on Old Nyack Road, Placer County. The property is owned by E. Stewart Wells and is identified as Assessor's Parcel Number 066-260-160-000. The site location is depicted on Attachment A, which is attached hereto and made part of this order by reference. The Discharger and property owner have entered into a lease agreement.
- 3. The Portable Plant will be used to produce construction materials for the Interstate 80 (I-80) surface improvement project from the Carpenter Flat Undercrossing to the Hampshire Rocks Undercrossing, which is approximately 42.75 lane miles long. The project location is presented on Attachment B, which is attached hereto and made part of this order by reference. Wastewater will be generated from the production of Portland cement concrete, and washing out the mixing drums of trucks used to transport the concrete.
- 4. This portion of the project to resurface I-80 is estimated to occur over the next two construction seasons, including the 2011 and 2012 seasons. As allowed by California Water Code (CWC) Section 13269, this waiver is in effect for five years unless rescinded sooner or the Executive Officer orders the discharge to cease.
- 5. Concrete manufacturing facilities blend aggregates, Portland cement, water, and chemical admixtures to create concrete. Based on analytical testing of concrete wastewater samples obtained in late 2002 by Regional Water Board staff from ten ready-mix plants, concrete wastewater may exhibit the characteristics listed below:

		Concentration	Applicable Water Quality	Source of Water Quality	(ab
<u>Parameter</u>	<u>Units</u>	<u>Range</u>	Objective <sup>1</sup>	Objective <sup>3</sup>	
pH	std	7.7 to 12.6	6.5 to 8.4	Ag WQG	
Total Dissolved Solids	mg/L	160 to 2,600	450	Ag WQG	

			Applicable Water	Source of Water
		Concentration	Quality	Quality
<u>Parameter</u>	<u>Units</u>	<u>Range</u>	Objective <sup>1</sup>	Objective <sup>3</sup>
Aluminum	ug/L	76 to 310 <sup>2</sup>	1,000	CA Primary MCL
Boron	ug/L	$2,900^2$	700	Ag WQG
Chromium, total	ug/L	53 to 280 <sup>2</sup>	50	CA Primary MCL
Chromium, hexavalent	ug/L	1.4 to 260 <sup>2</sup>	100	Ag WQG
Molybdenum	ug/L	10 to 300 <sup>2</sup>	10	Ag WQG
Sodium	mg/L	1.3 to 180	69	Ag WQG
Vanadium	ug/L	26 to 160 <sup>2</sup>	100	Ag WQG

<sup>&</sup>lt;sup>1</sup> The water quality objectives cited herein are numeric limits selected to apply the narrative water quality objectives for groundwater set forth in the Water Quality Control (Basin Plan) for the Sacramento River and San Joaquin River Basins for protection of the beneficial uses of groundwater.

<sup>2</sup> Analytical data are for filtered samples and represent dissolved concentrations.

### **Portable Plant Description**

- 6. The Portable Plant will consist of a portable concrete batch plant, an aggregate materials delivery system, a materials storage area, and a concrete washout/wastewater recycling area. The Portable Plant will occupy approximately 0.92 acres. A site plan is included as Attachment C, which is attached hereto and made part of this order by reference.
- 7. All of the material used for the production of concrete will be hauled to the site in bulk transfer trucks. The cement and admixtures will be transferred into individual self-contained units where the material will be stored onsite. The sand and aggregate materials will be stockpiled near the batch plant.
- 8. The Portable Plant will produce concrete during the construction season from May through October of each year. However, the operating season is conditional upon weather and other factors. Equipment that is stored onsite during the winter must be winterized in accordance to the *Portable Plant Winterization Report*.
- 9. The Portable Plant will be powered by a generator. Backup generators and standby portable pumps will also be available.
- 10. The Portable Plant will manufacture an average of approximately 1,800 cubic yards of concrete per day; peak production will be approximately 2,800 cubic yards per day.
- 11. High pressure, low volume equipment will be used to washout the concrete haul trucks and equipment.

<sup>&</sup>lt;sup>3</sup> Aggricultural Water Quality Goal (Ag WQG) or California Primary Maximum Contaminant Level (CA Primary MCL)

- 12. Approximately 6,500 gallons of concrete wastewater will be generated on a daily basis. Approximately 3,000 gallons per day of this water will be reused as concrete truck and equipment wash water and 3,500 gallons of the water used to make concrete.
- 13. The mixing drums of concrete trucks returning from the construction site will be washed out at the washout basin before being refilled with concrete. The wastewater generated will be recycled in the washout basin or used at the batch plant to make concrete. Wastewater will be managed as follows:
  - a. At the washout basin, wastewater will be discharged into a prefabricated dual-compartment steel washout basin measuring about 30 feet long, 20 feet wide and 5 feet high with an estimated volume of 18,000 gallons at one-foot freeboard.
  - b. Solids will settle in the first compartment of the washout basin, the second compartment will hold the decanted water.
  - c. Decanted water will be pumped to two above ground storage tanks.
  - d. The stored water will be reused to washout concrete trucks or used to mix concrete.
  - e. Solids removed from the washout basin will be used to make concrete or hauled off site for disposal.
- 14. To minimize the potential for discharges from the washout basin, the following will be constructed:
  - a. Trucks to be washed will drive onto an elevated ramp of the washout basin. The top of the ramp will consist of a level pad paved with asphalt.
  - b. A secondary containment area will be located under and around the washout basin and ramp. The secondary containment area will consist of a 60-mil polyvinyl chloride (PVC) liner covered with a one-foot layer of rounded drainage gravel and a K-rail/sand bag system designed to contain concrete wastewater onsite.
  - c. A new PVC liner will be used for each operational season. The secondary containment area will measure about 50-foot by 50-foot (2,500 square feet) and provide approximately 11,000 gallons of temporary and emergency storage.
  - d. Solids from the prefabricated washout basin will be dried on the secondary containment area. Solids will be removed on an as-needed basis to either

make concrete or be hauled to a designated recycling or disposal facility. Wastewater and stormwater collected on the drainage gravel will be pumped back into the washout basin.

### **Regulatory Considerations**

- 15. California Water Code, Section 13269 states In part that: "(a)(1) On and after January 1, 2000, the provisions of subdivisions (a) and (c) of Section 13260, subdivision (a) of Section 13263, or subdivision (a) of Section 13264 may be waived by the state board or a regional board as to a specific discharge or type of discharge if the state board or a regional board determines, after any necessary state board or regional board meeting, that the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest."
- 16. The Central Valley Water Board has a statutory obligation to prescribe waste discharge requirements except where a waiver is not against the public interest.
- 17. The Central Valley Water Board has determined that due to the engineered control measures, very limited potential for discharge, and short duration of the project, the discharge poses little threat to water quality.
- 18. This Order does not require the installation and monitoring of groundwater monitoring wells due to the low threat to water quality as described above.
- 19. Although all concrete wastewater will be contained for reuse or offsite disposal, elements of the Portable Plant will be exposed to stormwater.
  - a. The State Water Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001) specifying waste discharge requirements (WDR's) for discharges of stormwater associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers.
  - b. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.
  - c. The Discharger has not yet obtained the required stormwater permits. This Order requires the Discharger to obtain coverage under the stormwater permit program.
- 20. California Water Code (CWC) Section 13173(b) defines designated waste, in part as:

"Nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan."

- 21. This discharge is exempt from the requirements of *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq., (hereinafter Title 27). The exemption, pursuant to Section 20090(b) and 20090(h) is based on the following.
  - a. For the exemption based on Section 20090(i):
    - ...(i) Fully Enclosed Units--Waste treatment in fully enclosed facilities, such as tanks, or in concrete-lined facilities of limited areal extent, such as oil-water separators designed, constructed, and operated according to American Petroleum Institute specifications."
- 22. This order is applicable to all discharges of liquid waste to the washout basin and synthetic lined secondary waste containment area for the purpose of temporary storage and/or recycling provided that the system is designed, constructed, and operated so that the activity can be deemed exempt pursuant to Title 27 Section 20090(i).
- 23. Section 13267(b) of California Water Code states that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program No. R5-2010-\_\_\_\_ are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.

24. The Water Quality Control Plan, for the Sacramento and San Joaquin River Basins, Fourth Edition, (hereafter Basin Plan) designates beneficial uses, establishes water

quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Resources Control Board (State Water Board). Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.

- 25. Surface water drainage in the area is to numerous unnamed drainage ways and the North Fork of the American River. The beneficial uses of the North Fork of the American River from the source to Folsom Lake are municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; cold freshwater habitat; spawning, reproduction, and/or early development; and wildlife habitat.
- 26. The beneficial uses of the underlying groundwater are domestic, industrial, and agricultural supply.

#### **California Environmental Quality Act Considerations**

- 27. On 22 July 2010, Placer County acting as the lead agency determined the project is categorically exempt for environmental review pursuant to the provisions of Section 15304 of the California Environmental Quality Act Guidelines.
- 28. Placer County Planning Department issued a Temporary Conditional Use Permit No. PCPA20100191, which expires on 1 August 2011. The Discharger will update the Use Permit annually. If the Use Permit is not updated the Discharger must notify the Executive Officer as described in the Provisions.

#### **Public Notice**

- 29. All the above and the supplemental information and details in the attached Information Sheet, incorporated by reference herein, were considered in establishing the following conditions of discharge.
- 30. The Discharger and interested agencies and persons were notified of the intent to prescribe WDRs for this discharge, and provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 31. In a public meeting, all comments pertaining to the discharge were heard and considered.

IT IS HEREBY ORDERED that pursuant to Sections 13263, 13267, and 13269 of the California Water Code, the Central Valley Regional Water Quality Control Board waives waste discharge requirements for the Teichert Construction Company Nyack Portable Batch Plant and Concrete Recycling Plant, subject to the following conditions:

### A. Discharge Prohibitions

- Discharge of concrete, concrete washwater, or concrete/Portland cement containing wastewater or stormwater mixes to surface waters or surface water drainage courses is prohibited.
- 2. Operation of the Portable Plant to mix concrete between 1 November and 30 April of is prohibited.
- 3. Discharge of waste classified as "hazardous" as defined in Title 27 Section 20164 is prohibited.
- 4. Bypass or overflow of waste from the washout basin or the secondary containment area is prohibited.
- 5. Discharge of cement related waste other than to the washout basin, or to permitted offsite disposal facilities, is prohibited.
- 6. Discharge of domestic wastewater to the concrete wastewater recycling system is prohibited.

## B. Liquid Waste Discharge Specification

- 1. All wastewater must be contained in the washout basin, and the secondary containment area in such a manner that the wastewater does not contact the ground.
- 2. Wastewater shall be removed from the washout basin and the secondary containment area before capacity is reached, and may be removed by either a contracted waste hauler or by the Discharger.
- Any wastewater removed from the facility for disposal shall be discharged at an appropriately permitted treatment/disposal facility. The Discharger shall obtain receipts for the transported waste from the licensed hauler and the receiving facility.
- 4. The discharge of waste shall not cause a condition of nuisance or pollution as defined by CWC Section 13050.
- 5. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of this order.
- 6. Objectionable odors originating at the facility shall not be perceivable beyond the limits of the property owned by the Discharger.

- 7. All storage and disposal facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 8. The washout basin and the secondary containment area shall be managed to prevent breeding of mosquitoes. In particular, algae, vegetation, scum, and debris shall not accumulate on the water surface.
- 9. The waste management unit shall have sufficient storage and disposal capacity to accommodate allowable wastewater flow and the applicable design seasonal precipitation in accordance with the criteria set forth in this order.
- Freeboard in any washout basin and secondary containment area shall never be less than one foot as measured from the water surface to the lowest point of overflow.

#### C. Solid Waste Handling and Storage

- 1. The handling, storage, and off-site disposal of residual solids shall be consistent with this order.
- 2. Solids removed from wastewater may be dried and stored consistent with this order.
- 3. Solids drying and/or storage areas shall be designed, constructed, operated, and maintained to prevent the washout or inundation due to floods with a 100-year return frequency.
- 4. Neither the storage nor the disposal of residual solid waste shall result in nuisance odors, stormwater impacts, or groundwater impacts.
- 5. Any residual solids removed from the waste management unit for disposal shall be recycled or discharged at an appropriately permitted disposal facility. If solids are disposed of off-site, the Discharger shall obtain receipts for the transported waste from the licensed hauler and the receiving facility.

#### D. Groundwater Limitations

1. The discharge of waste shall not cause the underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality.

#### E. Design and Construction Standards

1. The washout basin and secondary containment area shall be engineered and constructed to completely contain all liquids and shall be designed to provide at least

one foot of freeboard at all times.

- 2. The washout basin and secondary containment area shall be designed to provide sufficient storage and disposal capacity to accommodate allowable wastewater flow, direct precipitation, and runoff during the following design precipitation events:
  - a. The total annual precipitation using a return period of 100 years (i.e., the 365-day, 100 year event), distributed monthly in accordance with historical rainfall patterns; and
  - b. The 100-year, 24-hour storm event.
- 3. Watertight liners that create the secondary containment area shall consist of flexible membrane liner or geomembrane manufactured, designed, and installed to be:
  - a. Functionally impervious to the waste to be contained.
  - b. Resistant to puncture, tearing, abrasion, or seaming melt-through damage during construction activities and expected service conditions.
  - c. Resistant to deterioration due to expected environmental conditions (e.g., oxidation, UV radiation, temperature extremes).
- 4. Sealants used to fill or caulk cracks, gaps, or expansion joints shall be manufactured, designed, and installed to adhere to form an impervious seal.
- 5. Construction of the secondary waste containment area covered under this Order shall be inspected and tested in accordance with an approved Construction Quality Assurance (CQA) Plan. The CQA Plan shall conform to the guidance set forth in *Technical Guidance Document: Construction Quality Assurance for Hazardous Waste Land Disposal Facilities* (EPA Publication No. 530SW86031) and Attachment D, which is attached hereto and made part of this order. The CQA Plan shall describe a program of inspection and testing designed to ensure that the applicable design and construction standards are achieved. The design professional that prepares the CQA Plan shall be a registered civil engineer or certified engineering geologist and the construction quality assurance program shall be supervised by a registered civil engineer or certified engineering geologist who shall be designated the CQA Officer.

#### F. Provisions

- 1. If Placer County declines to update the Use Permit, the discharger shall notify the Executive Officer within **seven days**.
- 2. Prior to construction of the Portable Plant, the Discharger shall obtain the following:

- a. An Industrial Stormwater Permit for discharges of stormwater associated with industrial activities.
- b. Coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity General Permit Order No. 2009-0009-DWQ.
- 3. At least **30 days** prior to initiating construction activities, the Discharger shall submit a *Construction Quality Assurance Plan* as described in Section 1 of Attachment D.
- 4. At least three days prior to proposed operation, the Discharger shall submit a Construction Quality Assurance Report as described in Section 2 of Attachment D. Certifying that the waste containment area covered in this order has been constructed, inspected, and tested in accordance with the CQA Plan and the Order requirements.
- 5. For every year that the waiver is effective, a *Portable Plant Winterization Report* must be submitted within **30 days** following completion of each operational season, but no later than **30 November**. The *Portable Plant Winterization Report* shall show that the residual wastewater and solids have been removed from the site and that the Portable Plant has been winterized to prevent stormwater, surface water, ect. from causing discharges of Portable Plant related constituents off-site. If **30 November** lands on a weekend, or a holiday the report is due the following business day.
  - If the Discharger elects to remove the entire Portable Plant, then the Winterization Report shall state that.
- 6. Pursuant to Section 13267 of the California Water Code, the Discharger shall comply with the monitoring and reporting requirements as described in Monitoring and Reporting Program No. R5-2010-XXXX shown in Attachment E, which is part of this order by reference.

Upon submittal of the technical reports described in the Provisions, the Discharger may begin discharging and recycling wastewater into the concrete washout basin in accordance with this Order.

This order expires on 8 December 2015.

This waiver of waste discharge requirements is conditional and may be terminated at any time.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a true, full, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on \_\_\_\_\_\_.

PAMELA C. CREEDON, Executive Officer

Attachments: A - Site Location Map

B - Project Location Map

C - Site Plan

D - Construction Quality Assurance Plan E - Monitoring and Reporting Program

tro/jgm:8/24/10